

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

What is claimed is:

1. A pig that lacks any expression of functional alpha1,3 galactosyltransferase.
2. An organ of a pig that lacks any expression of functional alpha1,3 galactosyltransferase.
3. The organ of claim 2, wherein the organ is a kidney.
4. The organ of claim 2, wherein the organ is a liver.
5. The organ of claim 2, wherein the organ is a heart.
6. The organ of claim 2, wherein the organ is a lung.
7. The organ of claim 2, wherein the organ is a pancreas.
8. A tissue of a pig that lacks any expression of functional alpha1,3 galactosyltransferase.
9. The tissue of claim 8, wherein the tissue is cartilage.
10. The tissue of claim 8, wherein the tissue is bone.
11. The tissue of claim 8, wherein the tissue is adipose.
12. The tissue of claim 8, wherein the tissue is muscle.

13. A cell or a cell line from a pig that lacks any expression of functional alpha1,3 galactosyltransferase.
14. The cell of claim 13, wherein the cell is derived from the pancreas.
15. The cell of claim 14, wherein the cell is an Islet of Langerhans cell.
16. The cell of claim 14, wherein the cell is an insulin secreting cell.
17. (withdrawn) A method for the production of a pig that lacks any expression of functional alpha1,3 galactosyltransferase comprising: breeding a male pig heterozygous for the alpha-1,3-GT gene with a female pig heterozygous for the alpha-1,3-GT gene.
18. (withdrawn) The method of claim 17, wherein one or both pigs are heterozygous due to the genetic modification of one allele of the alpha-1,3-GT gene to prevent expression of that allele.
19. (withdrawn) The method of claim 17, wherein one or both pigs are heterozygous due to the presence of a point mutation in an allele of the alpha-1,3-GT gene.
20. (withdrawn) The method of claim 19, wherein the point mutation is a T-to-G point mutation at the second base of exon 9 of the alpha-1,3-GT gene.
21. (withdrawn) The method of claim 17, wherein a male pig that contains a T-to-G point mutation at the second base of exon 9 of the alpha-1,3-GT gene is bred with a female pig that contains a T-to-G point mutation at the second base of exon 9 of the alpha-1,3-GT gene.
- 22- 39. (cancelled)
40. A cell that carries a homozygous knockout for the gal alpha-1,3-GT gene in which at least one allele contains a natural or spontaneous mutation in the gal alpha-1,3-GT gene, wherein said

cell is produced by a method comprising: (a) exposing a population of cells to *C. difficile* toxin A; (b) removing cells which are adversely affected by toxin A due to the receptor-mediated cytotoxicity of the toxin; and (c) expanding and maintaining a cell that does not show the effects of receptor-mediated cytotoxicity.

41. The cell of claim 40, wherein said cell carries a homozygous knockout for the gal alpha-1,3-GT gene in which at least one allele contains the base substitution thymine to guanine at base position 424 of the alpha 1,3 GT gene, resulting in the amino acid substitution tyrosine to aspartic acid at position 142 in the gal alpha-1,3-GT protein.

42. The cell of claim 40, wherein said cell carries a homozygous knockout for the gal alpha-1,3-GT gene in which at least one allele contains an induced mutation in the gal alpha-1,3-GT gene.

43. An animal produced according to the method of claim 22.

44. An animal produced by nuclear transfer cloning using the cell of claim 40 as a nuclear donor.

45. An animal produced by nuclear transfer cloning using the cell of claim 41 as a nuclear donor.

46. An animal produced by nuclear transfer cloning using the cell of claim 42 as a nuclear donor.

47. Cells, tissues, and organs obtained from the animal of claim 42 for use as an in vivo or ex vivo supplement or replacement for recipient cells, tissues or organs.

48. Cells, tissues, and organs obtained from the animal of claim 43 for use as an in vivo or ex vivo supplement or replacement for recipient cells, tissues, or organs.

49. Cells, tissues, and organs obtained from the animal of claim 44 for use as an in vivo or ex vivo supplement or replacement for recipient cells, tissues, or organs.

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50. Cells, tissues, and organs obtained from the animal of claim 45 for use as an in vivo or ex vivo supplement or replacement for recipient cells, tissues, or organs.